Blood Pressure Measurement: Statewide Tools and Resources

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High Blood Pressure

- High blood pressure, or hypertension (HTN): a major risk factor for heart disease, stroke, and kidney disease.
- In NC, in 2013:
 - About 2.7 M adults (36%) diagnosed with high blood pressure by a health professional
 - Up to 560,000 adults may have high blood pressure but are unaware of their condition
 - HTN was the primary cause of 855 deaths and a contributing cause to 23,808 heart disease and stroke deaths



High Blood Pressure

- HTN can be prevented or controlled if already high.
 This requires:
 - Lifestyle modification
 - Long-term medication adherence
 - Regular monitoring of blood pressure health care provider, at home
- Need for evidence-based strategies that can be implemented in communities to improve blood pressure control...

.....one such strategy is SMBP.



For Patients with High Blood Pressure

- What is SMBP?
 - Self-measured blood pressure monitoring (SMBP)
 refers to the regular measurement of one's own blood pressure
 - Broadly refers to regular use of a personal blood pressure measurement device by a patient outside a clinical setting
 - Typically at home, therefore referred to as "home blood pressure monitoring"



For Patients with High Blood Pressure

- Recommendations of The Community Preventive Services
 Task Force:
 - "Sufficient evidence" of effectiveness for SMBP interventions when used alone (i.e., patients receive self-measured blood pressure tools, training, and monitoring)
 - "Strong evidence" of effectiveness for these interventions when combined with additional support (i.e., patient counseling, education, or web-based support)



Self-Measured Blood Pressure Protocol

- The team at Community and Clinical Connections for Prevention and Health Branch has created a Self-Measured Blood Pressure Protocol to help implement SMBP interventions.
- Can be used by:
 - Health care providers more clinical, with inputs on workflow
 - Community pharmacists
 - Health educators
 - Worksites
 - Faith-based organizations
 - Community health workers



Self-Measured Blood Pressure Protocol

Contents:

- An Introduction to High Blood Pressure
- Self-Measured Blood Pressure Monitoring
 - Why to monitor?
 - Who should monitor?
 - Who should not monitor?
 - How to choose the right type of home monitor?
 - How to monitor?
- Implementation guide (for worksites)

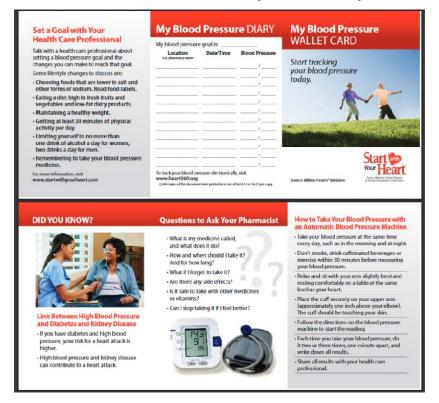


 Patient handout demonstrating steps to accurately measuring blood pressure.



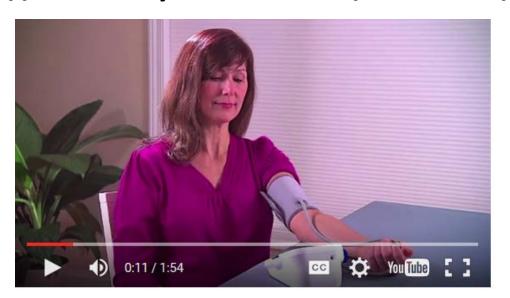


- BP wallet card for logging BP readings.
- Use of Heart360 website as a patient portal.





Self-monitoring of blood pressure: Video courtesy -Mayo clinic
 Link: http://startwithyourheart.com/Resources/index.php





- Blood Pressure measurement:
 - A frequently performed medical test
 - Quick and painless!
 - Only way to know whether pressure is high

 Seems to be such an easy measurement to make; accuracy of results is seldom questioned.



 Studies have shown that that 60-100% of blood pressure measurements are performed inaccurately.

 Underestimating true blood pressure by 5 mm Hgmislabel 20 M adults with prehypertension when true hypertension is present.



Blood Pressure Classification

JNC 7 Definition

| Blood Pressure (mm Hg) | | Category |
|------------------------|-----------|----------------------|
| Systolic | Diastolic | |
| <120 | and <80 | Normal |
| 120-139 | or 80-89 | Prehypertension |
| 140-159 | or 90-99 | Stage 1 hypertension |
| ≥160 | or ≥100 | Stage 2 hypertension |

The Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of Hypertension

 Consequences of an untreated 5 mm Hg of excessive systolic blood pressure: 25% increase in rates of fatal stroke and heart attack for these individuals.



 Conversely, overestimating true blood pressure by 5 mm Hg would lead to inappropriate treatment with antihypertension medications in almost 30 M adults.

 To improve the rates of accurate blood pressure measurement we created a **Blood Pressure** Refresher Training/Course for health care providers.



For Providers: Blood Pressure Refresher Training

- The **online** Blood Pressure Refresher training will:
 - Update healthcare providers on current concepts in hypertension detection, evaluation, and treatment.
 - Provide information on:
 - accurately and reliably measuring blood pressure
 - maintaining and calibrating blood pressure equipment
 - lifestyle modifications



For Providers: Blood Pressure Refresher Training

Audience:

- Physicians
- Mid-level providers such as Physician Assistants, Nurse Practitioners
- Nurses
- Office staff members who measure blood pressure
- Next steps: To offer this training with Continuing Education Units/Credits.



- A "Health Care Provider Blood Pressure Refresher" video:
 - Developed in house
 - Short 5.30 minutes
 - Shows proper techniques for blood pressure measurement: preparation, positioning, equipment, and technique
 - Link to video:http://startwithyourheart.com/Resources/index.php

